

C L A I M S

1. Method for the preparation of Mo-V-Te-Nb catalyst comprising the steps of:

a) preparing a slurry comprising ionic species of Mo, V, Te and Nb and an inert carrier by combining the inert carrier in ceramic form with one or more solutions comprising the above metal ionic species;

b) drying of the slurry to obtain a particulate product;

c) precalcining the dried particulate product at a temperature of 150-350°C in an oxygen-containing atmosphere;

d) calcining the precalcined dried particulate product at a temperature of 350-750°C in an inert atmosphere to obtain the catalyst.

2. Method according to claim 1 wherein the drying is performed by spray-drying, the spray-drying preferably being performed at a temperature of 100-250°C.

3. Method according to any of the preceding claims, wherein the calcining is conducted in an argon or nitrogen atmosphere.

4. Method according to any of the preceding claims, wherein the ceramic inert carrier has a mean particle size of 0.1-100 nm.

5. Method according to any of the preceding claims, comprising an additional step e) of processing the catalyst of step d) to catalyst particles having a size of 0.1-5 mm.

6. Mo-V-Te-Nb catalyst obtainable by the method of any of the preceding claims.

7. Use of a catalyst according to claim 6 for the preparation of acrylic acid or acrylonitrile by catalytic oxidation or ammoxidation, respectively, of propane.

8. Use of a catalyst according to claim 6 for the preparation of methacrylic acid or methacrylonitrile by catalytic oxidation or ammoxidation, respectively, of isobutane.

5 9. Use of a catalyst according to claim 6 for the preparation of acetic acid by catalytic oxidation of ethane.

10. Use according to any of claims 7-9, wherein the oxidation or ammoxidation is conducted in a fixed bed reactor.

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